

Amendments to the Claims

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Claim 1 (Previously Amended): Hybrid maize seed designated 39K40, representative seed of said hybrid 39K40 having been deposited under ATCC accession number \_\_\_\_\_.

Claim 2 (Original): A maize plant, or its parts, produced by the seed of claim 1.

Claim 3 (Original): Pollen of the plant of claim 2.

Claim 4 (Original): An ovule of the plant of claim 2.

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Claim 5 (Currently Amended): A tissue culture of regenerable cells or protoplasts of a hybrid maize plant 39K40, representative seed of said hybrid maize plant 39K40 having been deposited under ATCC accession number \_\_\_\_\_, wherein the tissue regenerates plants capable of expressing all the morphological and physiological characteristics of said hybrid maize plant 39K40.

Claim 6 (Previously Amended): The tissue culture according to claim 5, the cells or protoplasts of said cells having been isolated from a tissue selected from the group consisting of leaves, pollen, embryos, roots, root tips, anthers, silks, flowers, kernels, ears, cobs, husks, and stalks.

Claim 7 (Previously amended): A maize plant, or its parts, regenerated from the tissue culture of claim 5 and capable of expressing all the morphological and physiological characteristics of hybrid maize plant 39K40, representative seed having been deposited under ATCC accession number \_\_\_\_\_.

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Claim 8 (Currently Amended): The maize plant of claim 2 wherein said maize plant further comprises a genetic factor conferring male sterility.

Claims 9 - 49 (Canceled)

C1 Claim 20 (Original): A maize plant, or its parts, having all of the morphological and physiological characteristics of the plant of claim 2.

Claims 21-32 (Canceled)

33 Claim 33 (Currently Amended): A method of making a hybrid maize plant designated 39K40 comprising:

crossing an inbred maize plant GE535658, deposited as \_\_\_\_\_ with a second inbred maize plant GE516223, deposited as \_\_\_\_\_; and

developing from the cross a said hybrid maize plant representative seed of which having been deposited under ATCC Accession Number \_\_\_\_\_.

Claims 34 - 40 (Canceled)

34 Claim 41 (New): A method of developing a transgenic 39K40 maize plant, comprising transforming at least one of the inbred parents of 39K40 with a transgene, wherein a representative sample of said inbred parents have been deposited as \_\_\_\_\_ for GE535658 or \_\_\_\_\_ for GE516223, and crossing said inbred parents to produce a transgenic 39K40 hybrid maize plant.

Claim 42 (New): The maize plant of claim 41 wherein said transgene is a transgene selected from the group consisting of: a plant disease resistance gene, an insect resistance gene, an herbicide resistance gene, a male sterility gene, and a value added trait gene.

Claim 43 (New): The maize plant of claim 42 wherein said transgene is an insect resistance gene encoding a *Bacillus thuringiensis* polypeptide, a derivative thereof or a synthetic polypeptide modeled thereto.

Claim 44 (New): The maize plant of claim 42 wherein said transgene is an herbicide resistance transgene selected from the group consisting of: a transgene conferring glyphosate

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resistance, a transgene conferring glufosinate resistance, a transgene conferring imidazolinone resistance and a transgene conferring sulfonylurea resistance.

Claim 45 (New): A method of developing a backcross conversion 39K40 hybrid maize plant, comprising backcrossing a gene into at least one of the inbred parents of 39K40, wherein a representative sample of said inbred parents have been deposited as \_\_\_\_\_ for GE535658 or \_\_\_\_\_ for GE516223, and crossing said inbred parents to produce a transgenic 39K40 hybrid maize plant.

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Claim 46 (New): A method of making an inbred maize plant comprising:  
obtaining the plant produced by the method of claim 45; and  
applying double haploid methods to obtain a plant that is homozygous at essentially every locus, said plant having received all of its alleles from maize hybrid plant 39K40.

Claim 47 (New): The maize plant of claim 45 wherein said gene is a transgene selected from the group consisting of: a plant disease resistance gene, an insect resistance gene, an herbicide resistance gene, a male sterility gene, and a value added trait gene.

Claim 48 (New): The maize plant of claim 47 wherein said transgene is an insect resistance gene encoding a *Bacillus thuringiensis* polypeptide, a derivative thereof or a synthetic polypeptide modeled thereto.

Claim 49 (New): The maize plant of claim 47 wherein said transgene is an herbicide resistance transgene selected from the group consisting of: a transgene conferring glyphosate resistance, a transgene conferring glufosinate resistance, a transgene conferring imidazolinone resistance and a transgene conferring sulfonylurea resistance.

Claim 50 (New): A maize plant, or parts thereof, having all the morphological and physiological characteristics of hybrid maize plant 39K40 representative seed of said hybrid maize plant having been deposited under ATCC Accession No. \_\_\_\_\_.

Claim 51 (New): A method for producing a 39K40 progeny maize plant, comprising:

- (a) crossing the maize plant or plant parts of claim 2, with a second maize plant to yield progeny maize seed; and
- (b) growing said progeny maize seed, under plant growth conditions, to yield said 39K40 progeny maize plant.

Claim 52 (New): A method of making a hybrid maize seed 39K40 comprising:

crossing an inbred maize plant GE535658 and GE516223, deposited as \_\_\_\_\_ and \_\_\_\_\_, respectively to produce hybrid maize seed 39K40.

Claim 53 (New): A process for isolating an inbred parent of hybrid maize plant 39K40, representative seed of which have been deposited under ATCC Accession No. \_\_\_\_\_, comprising:

- (a) planting a collection of seed comprising seed of hybrid maize plant 39K40, said collection also comprising seed of said inbred parent;
- (b) growing plants from said collection of seed;
- (c) identifying an inbred parent plant; and
- (d) selecting said inbred parent plant.

Claim 54 (New): A method of making an inbred maize plant comprising:

obtaining the plant of claim 2; and

applying double haploid methods to obtain a plant that is homozygous at essentially every locus, said plant having received all of its alleles from maize hybrid plant 39K40.

Claim 55 (New): The method of claim 54 wherein said inbred line comprises at least about 75% genetic identity to a line selected from the group consisting of GE535658 and GE516223, deposited as \_\_\_\_\_ and \_\_\_\_\_, respectively.

Claim 56 (New): A method for producing a 39K40 progeny maize plant comprising:

- (a) growing the plant of claim 2, and obtaining self or sib pollinated seed therefrom; and
- (b) producing successive filial generations to obtain a 39K40 progeny maize plant.

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Claim 57 (New): A maize plant produced by the method of claim 56, said maize plant having received all of its alleles from hybrid maize plant 39K40.

Claim 58 (New): A method for producing a population of 39K40 progeny inbred maize plants comprising:

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- (a) growing the plant of claim 2 and obtaining self or sib pollinated seed therefrom; and
  - (b) producing successive filial generations to obtain a population of 39K40 progeny inbred maize plants.

Claim 59 (New): A maize plant from the inbred population of maize plants produced by claim 67, said plant having received all of its alleles from hybrid maize plant 39K40.

Claim 60 (New): A method for developing a maize plant in a maize plant breeding program comprising:

obtaining the maize plant, or its parts, of claim 2; and  
utilizing said plant or parts as a source of breeding material.

Claim 61 (New): An 39K40 progeny maize plant, or parts thereof, wherein at least one ancestor of said 39K40 progeny maize plant is the maize plant of claim 2, and wherein the pedigree of said 39K40 progeny maize plant has 2 or less breeding crosses to a plant other than 39K40.